



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
ONE CONGRESS STREET SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

August 18, 2011

Kenneth Kimmell, Commissioner
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

Re: Charles River and Alewife Brook/Mystic River CSO Variances

Dear Commissioner Kimmell:

This letter responds to the Massachusetts Department of Environmental Protection's ("MassDEP") March 21, 2011 submittal of combined sewer overflow ("CSO") variances, along with pertinent fact sheets and a response to public comments, to the Environmental Protection Agency ("EPA") for review. The variances are for CSO discharges by the Massachusetts Water Resources Authority ("MWRA"), the City of Somerville, and the City of Cambridge to Alewife Brook/Upper Mystic River; and for CSO discharges by the MWRA, the City of Cambridge, and Boston Water & Sewer Commission to the Lower Charles River/Charles Basin. MassDEP issued the variances for terms of three years on August 26, 2010 with effective dates of September 1, 2010 and October 1, 2010 for the Alewife Brook/Upper Mystic River and the Lower Charles River/Charles Basin, respectively. On February 8, 2011, MassDEP's General Counsel certified the variances as having been duly adopted pursuant to Commonwealth law. By today's letter, EPA approves these variances.

EPA reviews variances under Section 303 of Clean Water Act ("CWA"), which addresses EPA consideration of, and action on, state water quality standards. A variance typically is a short-term revision to an otherwise applicable water quality standard. See 63 Fed. Reg. 36742, 36759 (July 7, 1998). EPA generally will only approve a state's variance where there is a demonstration that one of the factors that would justify removal of a designated use or establishment of a subcategory of use has been satisfied, specifically the factors published at 40 C.F.R. 131.10(g). Id. In addition, a variance typically applies to individual dischargers and for a specific pollutant(s) and does not otherwise modify the applicable water quality standards. Id. Under Section 303(c)(1) of the CWA and 40 C.F.R. 131.20(a), a variance should be reviewed, at a minimum, every three years, and extensions are warranted only where the conditions for granting the variance still apply. Id. Upon expiration of the variance, the underlying numerical criteria have full regulatory effect. Id.

Consistent with these considerations and based on review of the materials submitted, pursuant to Section 303(c)(3) of the Clean Water Act (CWA) and 40 C.F.R. 131.21, I hereby approve the

variances for the CSO discharges from the MWRA, the City of Somerville, and the City of Cambridge to Alewife Brook/Upper Mystic River, and the variances for the CSO discharges from the MWRA, the City of Cambridge, and Boston Water & Sewer Commission to the Lower Charles River/Charles Basin.

These variances are three-year extensions of variances previously issued by MassDEP and approved by EPA. On March 14, 2006, EPA approved variances for the MWRA's CSO discharges to the Alewife Brook/Upper Mystic River and the Lower Charles River/Charles Basin. EPA's action approved the triennial reissuance of those variances through the year 2020, subject to conditions specified in EPA's March 14, 2006 letter. To ensure that those conditions are satisfied, EPA also reviews and takes a separate approval action on each triennial reissuance of the variances for MWRA through 2020. EPA's most recent approval of the variances for the MWRA CSO discharges occurred on July 29, 2008. Also on that date, EPA approved variances for the CSO discharges from the City of Somerville and the City of Cambridge to Alewife Brook/Upper Mystic River, and the variances for the CSO discharges from the City of Cambridge and Boston Water & Sewer Commission to the Lower Charles River/Charles Basin.

In accordance with the variances, CSO discharges from permitted outfalls are not required to meet effluent limits based on the Massachusetts Class B bacteria criteria during events when flow in the collection system exceeds the collection system conveyance capacity as a result of precipitation or snow melt. The bacteria variances require continued implementation of CSO long term control measures consistent with MWRA's 1997 Final CSO Facilities Plan, as amended, for Alewife Brook /Upper Mystic River and the Lower Charles River/Charles Basin (the Long Term Control Plan) and do not in any way delay the pace of implementation that would occur without the variances. Rather, the projects that are to be implemented during the term of these variances will improve water quality in associated waters.

Numerous analyses have been completed since the late 1980s evaluating alternatives for eliminating combined overflows from the collection system tributary to the Deer Island Treatment Plant. Among these are the 1997 CSO Facilities Plan and Environmental Impact Report; the 2001 Notice of Project Change for the Long Term Control Plan for Alewife Brook; the July 1, 2003 MWRA Final Variance Report for the Alewife Brook /Upper Mystic River; and the January 2004 Cottage Farm CSO Facility Assessment Report. Based on these analyses, MassDEP determined that proceeding at this time with controls necessary for full attainment of the applicable Class B bacteria criteria and associated recreational use would result in substantial and widespread economic and social impact as those terms are used in 40 C.F.R. 131.10(g)(6).

EPA's independent evaluation of these analyses, MassDEP's March 21, 2011 submission, and projected control costs and current sewer rate and household income information, confirms that it is not feasible to fully attain the Class B bacteria criteria and associated recreational use within the three year term of the variances without causing widespread economic and social impact. Therefore, EPA has determined that the variances satisfy the relevant CWA and regulatory requirements. In addition, EPA has concluded that the variances for the MWRA's CSO discharges are consistent with the conditions set forth in EPA's 2006 approval. Specifically, the variances have been re-evaluated within three years of the last variance extension to determine if there is new information that would warrant a change in the terms of the variances; the variances

continue to require the MWRA to comply with the Court Order and Long Term Control Plan; and no information has been presented leading to the conclusion that the CSO discharges are causing impacts of a different character, or outside the range of impacts that can be expected, which would warrant adjustment of the variance conditions.

For the reasons discussed above, EPA approves these variances for the MWRA, the City of Somerville, the City of Cambridge, and Boston Water & Sewer Commission, which temporarily revise the water quality criteria for bacteria by rendering them inapplicable to the identified permittees for CSO discharges into the identified receiving waters during specified wet weather events.

We look forward to continued cooperation with Massachusetts in the development, review, and approval of water quality standards pursuant to our responsibilities under the Clean Water Act. If you have any questions, please contact Ellen Weitzler (617-918-1582) or Michael Wagner (617-918-1735).

Sincerely,



Stephen S. Perkins, Director
Office of Ecosystem Protection

cc: Ann Lowery, MassDEP
Marcia Sherman, MassDEP
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